ŻAGRODSKI, Stanisław, prof.,dr. (Lodz)

Advances in the food preservations; a report on the 9th Congress of Engineers and Technicians of Poland's food industry. Acta chimica Hung 23 no.1/4:439-443 '60. (REAI 10:9)

1. Politechnika Lodzka, Lodz.

(Food) (Insects) (Vitamins) (Enzymes)
(Sorbic acid)

ZAGRODZKI, Stefan, mgr.inz.

Bridge foundations made of reinforced piles. Drogownictwo 17 no.1: 6-12 Ja '62.

ZAGRODZKI, S.

Present-day view on sugar crystallization. p. 185

WIADOMOSCI CHEMICZNE. (Polskie Towarzystwo Chemiczne) Wroclaw, POLAND
Vol. 13, no. 4, Apr. 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 7, July 1959

UNCL.

ZAGRODZID, S.

Sugar refineries in the U. S. p. 62

GAZETA CUKROWNICZA. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemysłu Rolnego i Spozywczego i Centralny Zarzad Przemysłu Cukrowniczego) Warszawa, Poland. Vol. 61, no. 3, March 1959.

Monthly List of European Accessions (EEAI) LC. Vol. 8, no.8 August 1959.

Uncl.

Zagrodzki, S.

Remarks on a long-range plan of the food industry. p. 3.

PRZEMYSL SPOZYWCZY. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemyslu Spozywczego) Warszawa, Poland. Vol. 13, no. 1/3, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9 No. 2, Feb. 1960.

Uncl.

Zagrodzki, S.

Research centers of the chemistry and technology of food in Poland. p. 63.

PRZEMYSL SPOZYWCZY. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemyslu Spozywczego) Warszawa, Poland. Vol. 13, no. 1/3, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9 No. 2, Feb. 1959.

Uncl.

B-20

COUNTRY : Poland
CATEGORY :

80027

ABS. JOUR. : RZKhim., No.22 1959, No.

AUTHOR : Zagrodzki, S. and Zaoreka, H.
INST. : Not given
TITLE : The Automatic Regulation of the Cartonation Process

ORIG. PUB. : Gaz Cukrown, 61, No 1, 8-11 (1959)

ABSTRACT : The authors recommend that the automatic regulation of the first carbonation be carried out in accordance with the pH of the juice to be carbonated. In order to improve the effectiveness of the introduction of automatic controls, it is desirable that the defecation, CO_2 feed, and juice feed be also automatically controlled. Examples of the automation of the first carbonation are given. The authors recommend that the second carbonation be controlled automatically not only in

CARD: 1/2

ZAGRODZKI, S.; NIEDZIELSKI, Z.

Determination of water in products and intermediary material by the modified K. Fisher method. p. 150.

GAZETA CUKROWNICZA. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemysłu Rolnego i Spozywczego i Centralny Zarzad Przemysłu Cukrowniczego) Warszawa, Poland. Vol. 61, no. 5, May 1959.

Monthly List of European Accessions (EEAI) LC, Vol. 8, no. 8 August 1959.

Uncl.

ZACHODZKI, S.; ZAORSKI, H.

Determination of sugar losses in lime cake.
p. 259.

CHEMIA ANALITYCZNA. (Komisja Analityczna Polskie Akademii Nauk i Naczelna Organizacja Techniczna) Warszawa. Poland. Vol. 4, No. 1/2, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959
Uncla.

ZAGRODZKI, S

H-26

COUNTRY : Poland
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No. 58724

AUTHOR : Zagrodzki, S., Niedzielski, Z., and Walerianczyk, E.
INST. : Not given
TITLE : Investigation of Filter Cloths

ORIG. PUB. : Gaz Cukrown, 60, No 11, 342-345 (1958)

ABSTRACT : The authors present results from comparison tests made for the purpose of evaluating various types of cloth used in the filtration of the juices at sugar plants. Nylon, linen, viscose, cotton, and jute cloths were compared and their properties are described. Among the variables studied were filtration rate, turbidity of the filtrate, adhesion of the cake, and resistance to tear. Nylon cloth was found to be best suited, followed by linen, viscose, cotton, jute, and glass cloth, in that order.

D. Bronshteyn

CARD: 1/1

Zagrodzki, S.

H-28

Country : POLAND
Category : Chemical Technology. Food Industry

Abs. Jour : Ref Zhur-Khimiya, No 11, 1959, No 34441

Author : Zagrodzki, S.; Znorska, H.
Institute :
Title : Rapid Determination Method of Ash Content of Food Products' Solutions

Orig Pub. : Przem. spozywczy, 1958, 12, No 8, 313

Abstract : Developed is a rapid determination method for inorganic substances employing ion exchange principle. The content of separated cations is determined by titration. -- Z. Fabinskiy

Card: 1/1

H-28

Country : POLAND

H

COUNTRY : POLAND
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their Processing.
ABS. JOUR. : RZhKhim., No 17, 1959, No. 62447

AUTHOR : Szarejko, R.; Zagrodzki, S.; Dobrycki, J.
INSTITUTE : -
TITLE : Effects of Calcium Carbonate and of Saturated Residue on the Increase of Juice Color During*
ORIG. PUB. : Roczn. technol. i chem. zywn., 1957, 2, 101-112

ABSTRACT : Presented are analysis techniques and results of investigations conducted in laboratory and in commercial installations pertaining to the effects of $CaCO_3$ particles and of the saturated residue on the increased coloration of the evaporated juice and on the fouling of evaporator heat transfer surfaces. It is proved that in the presence of $CaCO_3$ particles, the juice does not darken which is explained by the adsorption of coloring compounds present in the juice and formed during the

*the Evaporation and on Fouling of the Heating Surfaces in Evaporators.

Card: 1/2

H - 107

H

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhKhim., No 17, 1959, No. 62447

AUTHOR :
INSTITUTE :
TITLE :

ORIG. PUB. :

ABSTRACT Con'd : evaporation step by $CaCO_3$. Steam bubbles, formed near $CaCO_3$ particles, prevent local overheating of the juice and caramelization of sugar. $CaCO_3$ tends to bind certain decomposition products of sugar that cause darkening of the juice. Effects of the saturated residue is analogical, and sometimes more favorable, than that of chemically pure chalk. The evaporation of juices and of clarified liquors, containg $CaCO_3$ particles and residue, does not present difficulties.

-- D. Bronshteyn.

Card: 2/2

H

Country : POLAND
Category : Chemical Technology. Chemical Products (Part 3). Carbohydrates and Their Processing
Abs. Jour. : Ref Zhur-Khim, 1959, No 7, 25053

Author : Zagrodzki, S.
Institut. : -
Title : Principles of the Automatic Regulation of an Evaporating Station

Orig Pub. : Gaz. cukrown., 1958, 60, No. 4, 105-108

Abstract : A plan is described for the automatic regulation of a multiple evaporating station of a sugar plant having a capacity of 2,400 tons of sugar beet within 24 hrs.; the plan is based upon the constancy of the second phase steam temperature and on the regulation of certain parameters of the station, depending upon the requirements of the production. Problems of the regulation of the steam supply, the level, the supply and the specific gravity of the juice,

Card: 1/2

H

GDR / Chemical Technology. Chemical Products and Their Application. (Part 1) Conditioning of Water. Waste Water.

Abs Jour : Ref Zhur - Khimiya, No 10, 1959, No. 35321

Author : Zagrodzki, Stanislav; Zaorska, Helena
Inst : Not given
Title : Determination of Low Salt Content in Purified Water for Boiler Feeding

Orig Pub : Chem. Techn., 1958, 10, No 4, 210-212

Abstract : The flame photometric method, permitting continuous supervision, is considered as the most promising method. It is indispensable to ensure a continuous inflow of the sample and a constant pressure of gas in the burner when using regular flame photometers with monochromators or with a corresponding set of light filters. It is possible to use a preliminary concentration of samples to increase the sensitivity of measurements. It is shown

Card 1/2

H

POLAND / Chemical Technology. Chemical Products and Their Application. (Part 1) Conditioning of Water. Waste Water.

Abs Jour : Ref Zhur - Khimiya, No 10, 1959, No. 35322

Author : Zagrodzki, S.; Zacrska, H.
Inst : Not given
Title : Determination of Low Salt Content in Purified Water for Boiler Feeding

Orig Pub : Przem. spozywczy, 1958, 12, No 8, 318-319

Abstract : No abstract given. A brief account. See preceding abstract No. 35321

Card 1/1

ZAGRODZKI, S.

TECHNOLOGY

Periodicals: GAZETA CUKROWNICZA. Vol. 60, no. 10, Oct. 1958

ZAGRODZKI, S. Automation in the sugar industry. p. 301

Monthly List of East European Accessions (EEAI) LC, Vol.8, No. 2, February 1959, Unclass.

H

POLAND / Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their Processing.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 13386.

Author : Zagrodzki, Stanislaw.
Inst : Not given.
Title : Influence of Juice Circulation on the Rate of the Diffusion Process.

Orig Pub: Roczn. technol. i chem. zywn., 1957, 1, 19-26.

Abstract: By laboratory experiments and theoretical calculations, it wes established that the rate of sugar diffusion (V) of garden beet cossettes is influenced by an addition current (X) of sugar diffusion through the inactive layer of the juice which encircles the cossettes and, consequently, the Fikka equation can be represented in the form

Card 1/2

POLAND / Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their Processing. H

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 13402.

Author : Zagrodzki, Stanislaw; Dobrzycki, Jan; Zaorska, Helena.

Inst : Not given.

Title : Investigation of the Functioning of the Continuous-Process Diffuser Appliance of the "Ollye" System.

Orig Pub: Gaz. cukrown., 1958, 40, No 3, 71-77.

Abstract: On the basis of measurements made, the dosage, course of diffusion, quality of juice (rate, microbiological evaluation, pH), corrosion of the apparatus are described. Material and heat equilibria are cited, as well as data characterizing the hydraulic resistances. On the whole,

Card 1/2

~~STANISLAW~~ ZAGRODSKI, S

POLAND / Chemical Technology, Chemical Products and Their Application. Part 3 - Carbohydrates and Their Treatment. H-25

Abs Jour : Ref. Zhur. Khimiye, No 4, 1958, 12736.

Author : Stanislaw Zagrodski, Helena Zaorska.

Inst : Not given

Title : Determination of Calcium Salt Content in Sugar Juices by Simplified Versenate Method.

Orig Pub : Gaz. cukrown., 1956, 38, No 11, 282 - 284.

Abstract : A simplified method with less reagents. A table of direct calcium salt contents in mg of CaO per 100°Br for a rapid determination of the optimum alkalinity of a 2nd saturation juice.

Card 1/1

~~ZAGRODSKI~~ ZAGRODSKI, S.

E-25

POLAND / Chemical Technology, Chemical Products and Their Application. Part 3 - Carbohydrates and Their Treatment.

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12735.

Author : Stanislaw Zagrodski, Zofia Niwinska.

Inst : Not given.

Title : Determination of Calcium Salt Content in Sugar Juices and Products by New Versenate Method

Orig Pub : Gaz. cukrown., 1956, 58, No 2, 35 - 38.

Abstract : In consequence of the coloration, the solutions are titrated by the reverse method. A buffer ($NH_4OH + NH_4Cl$) is added to the solution up to pH = 8 to 10 together with an excessive amount of a titrated versenate solution; the indicator chromate black and the excessive versenate are titrated

Card 1/2

ZAGRODZKI, S. , WALERIANCZYK, E.

Mechanical purification of diffused and extracted waters to be returned for diffusion. P, 51.

ROCZNIKI TECHNOLOGII I CHEMII ZYWNOSCI. ANNALS OF FOOD TECHNOLOGY AND CHEMISTRY. (Polska Akademis Nauk. Komitet Technologii i Chemii Zywnosci) Warszawa, Poland. Vol. 3, 1958.

Monthly List of East European accession (EEAI), LC. Vol. 8, No. 9, September, 1959. Uncl.

ZAGRODZKI, W.

ZAGRODZKI, W.

The future of inland harbors.

p. 297 (Technika I Gospodarka Morska) Vol. 7, No. 10, Oct. 1957, Gdansk , Poland

SB: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

ZAGRODZKI, Waclaw, Kapitan zeglugi wielkiej (Gdynia)

General average. Techn gosp morska 12 no.2:51 '62.

LYALIKOV, A.S.; ZAGROMOV, Yu.A.; YERSHOVA, L.S.

Experimental data on the dissipation power of the additional resistances of electric measuring instruments (under conditions of free convection). Izv.TPI 137:25-28 '65.

(MIRA 19:1)

ZAGROMOV, Yu.A.; KOROLENKO, Yu.A.

Heat emission of a vertical row of horizontal pipes in the case of free air convection. Izv.TPI 137:52-58 '65.
(MIRA 19:1)

L 32998-66 EWT(1) WW

ACC NR: AP6014984 SOURCE CODE: UR/0170/66/010/005/0577/0583

57
B

AUTHOR: Zagromov, Yu. A.; Lyalikov, A. S.

ORG: Polytechnic Institute im. S. M. Kirov, Tomsk (Politekhnicheskiy institut)

TITLE: Free convective heat transfer in a horizontal cylindrical slot with a different position of the heat evolving element

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 5, 1966, 577-583

TOPIC TAGS: convective heat transfer, thermodynamic analysis

ABSTRACT: The basic elements of the experimental apparatus (shown in a figure) were: a thin walled polished and nickeled copper foil (thickness 0.25 mm), an electric heater consisting of a thick walled polished and nickeled copper tube. The surface temperature of the heater was measured directly by thermocouples welded to the wall of the tube. The convective heat transfer medium was air. All measurements were made under strictly steady state conditions. Based on experimental data, a figure shows the change in the dimensionless temperature for vertical and horizontal displacement. For purposes of comparison an exhaustive table shows relationships proposed by various authors for

UDC: 536.25

Card 1/2

L 32993-66

ACC NR: AP6014984

calculation of heat transfer in horizontal cylindrical slots. Finally, a relationship is derived which is said to permit, with sufficient accuracy, calculation of heat transfer through gas and liquid cylindrical symmetrical slots in the range of $3 \leq \log(Ra\delta)_f \leq 8$. Orig. art. has: 1 formula, 4 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 29Sep65/ ORIG REF: 006/ OTH REF: 005

Card 2/2

LIALIKOV, A.S.; ZAGRUMOV, Yu.A.

Free convectional heat transfer in a closed volume during the displacement of the heat emission source. Inv.VUZ 137:99-101 '65.

(MIRA 19:1)

TYUSHNYAKOVA, M.K.; FEDOROV, Yu.V.; ZAGROMOVA, M.S.; BELOVA, F.S.

Specific properties of cerebral diagnosticum precipitated in methyl alcohol in tick-borne encephalitis. Trudy TomNIIVS 11: 66-71 '60. (MIRA 16:2)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok i Klinika infektsionnykh bolezney Tomskogo meditsinskogo instituta.
(ENCEPHALITIS) (ANTIGENS AND ANTIBODIES)
(COMPLEMENT FIXATION)

ZAGROMOVA, M.S.

PHASE I BOOK EXPLOITATION SOV/4146

Tomsk. Nauchno-issledovatel'skiy institut vaktsin i syvorotok

Trudy, tom 11 (Transactions of the Tomsk Scientific Research Institute of Vaccines and Serums, Vol. 11) Tomsk, Izd-vo Tomskogo univ-ta, 1960. 327 p. 1,700 copies printed.

Editorial Board: B.G. Trukhmanov (Resp. Ed.) Director of the Tomsk Scientific Research Institute of Vaccines and Serums; S.P. Karpov (Deputy Ed.) Professor; Ye. I. Kleytman (Secretary); N.A. Mastenitsa; and V.M. Popov (Deceased); Tech. Ed.: A.T. Gozvskiy.

PURPOSE: This collection of articles is intended for biologists, physicians, and medical personnel.

COVERAGE: The collection contains 18 papers on problems of epidemiology and microbiology and 33 reports on the theory and practice of immunology. To avoid repetition of names of organizations in the table of contents the following affiliations will be abbreviated: Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok (Tomsk Scientific Research Institute of Vaccines and Serums) as "Tomsk Institute"; Tomskiy meditsinskiy institut as "Tomsk Medical Institute"; Kafedra mikrobiologii Tomskogo meditsinskogo instituta (Department of Microbiology of the Tomsk Medical Institute) as "Tomsk Department of Microbiology."

THEORY AND PRACTICE OF IMMUNOLOGY

ZAGROMOVA, M.S.

Preparation of antigens of lymphocytic choriomeningitis for complement fixation reaction. Trudy TomNIIVS 14:254-257 '63.

Development of an expedient method of preparing immune serum against the virus of lymphocytic choriomeningitis. Ibid.:258-261 (MIRA 17:7)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.

ZAGROMOVA, M.S.

Use of dry sera in complement fixation reaction for the diagnosis of tick-borne encephalitis. Trudy Tom NIIVS 12: 33-36 '60 (MIRA 16:1.1)

1. Tomskiy nauchno-issledovatelskiy institut vaktsin i sy-vorotok.

TYUSHNYAKOVA, M.K.; MYASOYEDOV, V.S.; YEROFEYEV, V.S.; ZAGROMOVA, M.S.

Some data on the incidence and foci of lymphocytic choriomeningitis in Tomsk Province. Trudy Tom NIIVS 12:91-95 '60 (MIRA 16:11)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.

TYUSHNYAKOVA, M.K.; ZAGROMOVA, M.S.

Research data on lymphocytic choriomeningitis in Tomsk Province. Trudy TomNIIVS 11:25-32 '60. (MIRA 16:2)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok. (TOMSK PROVINCE—MENINGITIS) (LYMPHOCYTES)

TYUSHNYAKOVA, M.K.; ZAGROMOVA, M.S.; FEDOROV, Yu.V.

Production of a diagnostic preparation for the complement fixation reaction in tick-borne encephalitis. Vop. virus. 5 no. 3:204-208 My-S '60. (MIRA 14:4)

1. Tomskiy institut vaktsin i syvorotok Ministerstva zdravookhraneniya RSFSR.

(ENCEPHALITIS) (COMPLEMENT FIXATION)

GAKKEL', L.B.; ZAGRUBSKAYA, A.L.; MEYYER, M.N.; MOLOTKOVA, I.A.

Prolonged sleep therapy of temporary disturbances occurring in oligophrenia. Zhur.nevr.i psikh. 54 no.2:149-152 F '54. (MIRA 7:3)

1. Institut eksperimental'noy meditsiny i Dom invalidov im. K.Marksa v Leningrade. (Sleep) (Inefficiency, Intellectual))

L 2201-66 EWT(1) IJP(c)

ACCESSION NR: AP5017332 UR/0181/65/007/007/2232/2234

AUTHOR: Vilesov, F. I.; Zagrubskiy, A. A.; Zelikin, Ya. M.

TITLE: Excitation of fluorescence of zinc oxide by "hot" photoelectrons generated by vacuum ultraviolet radiation

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2232-2234

TOPIC TAGS: zinc oxide, fluorescence, uv radiation, electron bombardment, photoelectron

ABSTRACT: This is a continuation of earlier investigations in the 1600--1000 Å range (DAN SSSR v. 141, 1063, 1961), but extended to the 4000--8500 (3.0--14.5 ev) range. The purpose of the investigation was to identify the mechanism responsible for the decrease in the kinetic energy of the primary photoelectrons. The samples investigated were dense polycrystalline sublimated layers of zinc oxide prepared by a method described earlier (PTE no. 2, 130, 1962). The excitation spectra were likewise obtained with previously described apparatus. The measured spectrum consists of three peaks at photon excitation energies 3.5 ± 0.2, 7.5 ± 0.2, and 10.8 ± 0.2 ev, and 3 minima at 6.4 ± 0.2, 9.4 ± 0.2, and 12.8 ± 0.2 ev. The main feature of this spectrum is the fact that the peaks are equidistant, with the energy difference equal to the width of the forbidden band (3.2 ev). Such a spectrum can

Card 1/2

L 2204-66

ACCESSION NR: AP5017332

be attributed to impact ionization of the valence electrons in the conduction band by the primary electrons which have sufficient kinetic energy. The results indicate also that the quantum yield of the fluorescence of the zinc oxide is increased by the impact ionization of the valence electrons when excited with vacuum ultraviolet. This agrees with the universally accepted opinion that the effective mass of the hole in zinc oxide is much larger than the effective mass of the electron. Orig. art. has: 1 figure.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 15Feb65 ENCL: 00 SUB CODE: GS, OP

NR REF SOV: 008 OTHER: 001

Card 2/2 DP

AUTHOR: Vilesov, F. I.; Zagrubskiy, A. A.; Garbuzov, D. Z.

TITLE: Photoemission from the surface of organic semiconductors

SOURCE: Fizika tverdogo tela, v. 5, no. 7, 1963, 2000-2006

TOPIC TAGS: photoemission, organic semiconductor, molecular crystal, poly- [illegible] anthracene, [illegible] dimethylnitrosoaniline, chlorophyll a, scattering, photon energy, electron, photoelectron, photoelectronic work function

ABSTRACT: Electron distribution within the occupied energy band and the mechanism [illegible] studied in polycrystalline thin films of anthracene; [illegible] films were prepared by vacuum deposition on a metallic disk, a few were [illegible] was illuminated with monochromatic radiation in [illegible]

Card 1/3

L 11300-63
ACCESSION NR: AP3003901

... range. Emitted electrons were trapped within an ... conducting tin oxide film

... energy. ... in the same order.

... electrons is the ... from the surface ... values for the scattered energy

phyll ... exhibit only one peak ... in the range studied. The 0.5 ev, and is independent of photon energy in the range studied.

Card 2/3

I 11300-63
ACCESSION NR: AP3003901

photoelectronic work function for all the compounds studied was found constant

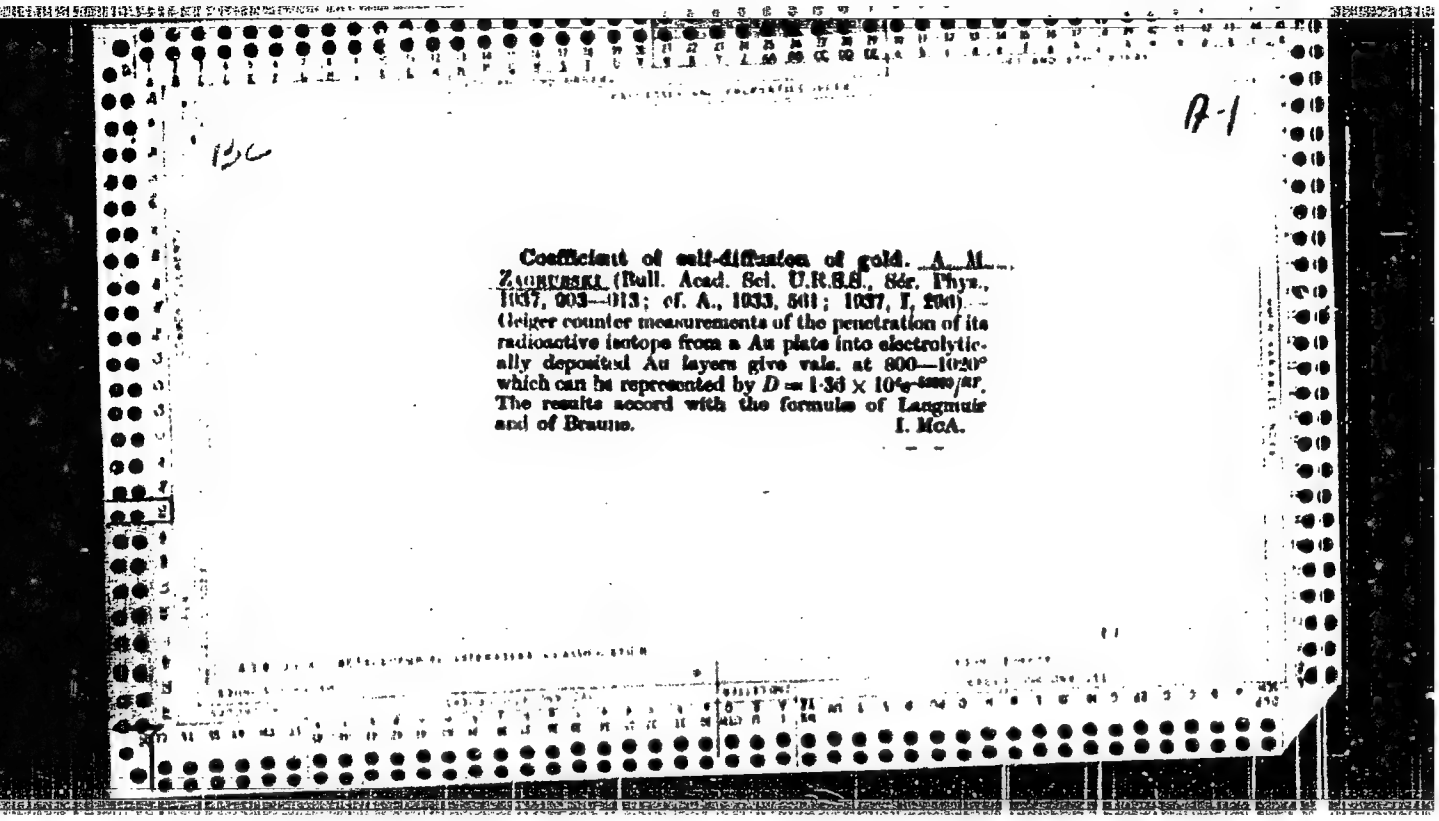
concluded that 1) the probability of electron ejection is nearly independent

dynamic equilibrium per cause photochemical reactions. "In conclusion the authors take the opportunity to express thanks to Academician A. N. Terenin for his constant interest in the work and for his discussion of the results." Orig. art has: 5 figures, and 2 tables.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State Univer.

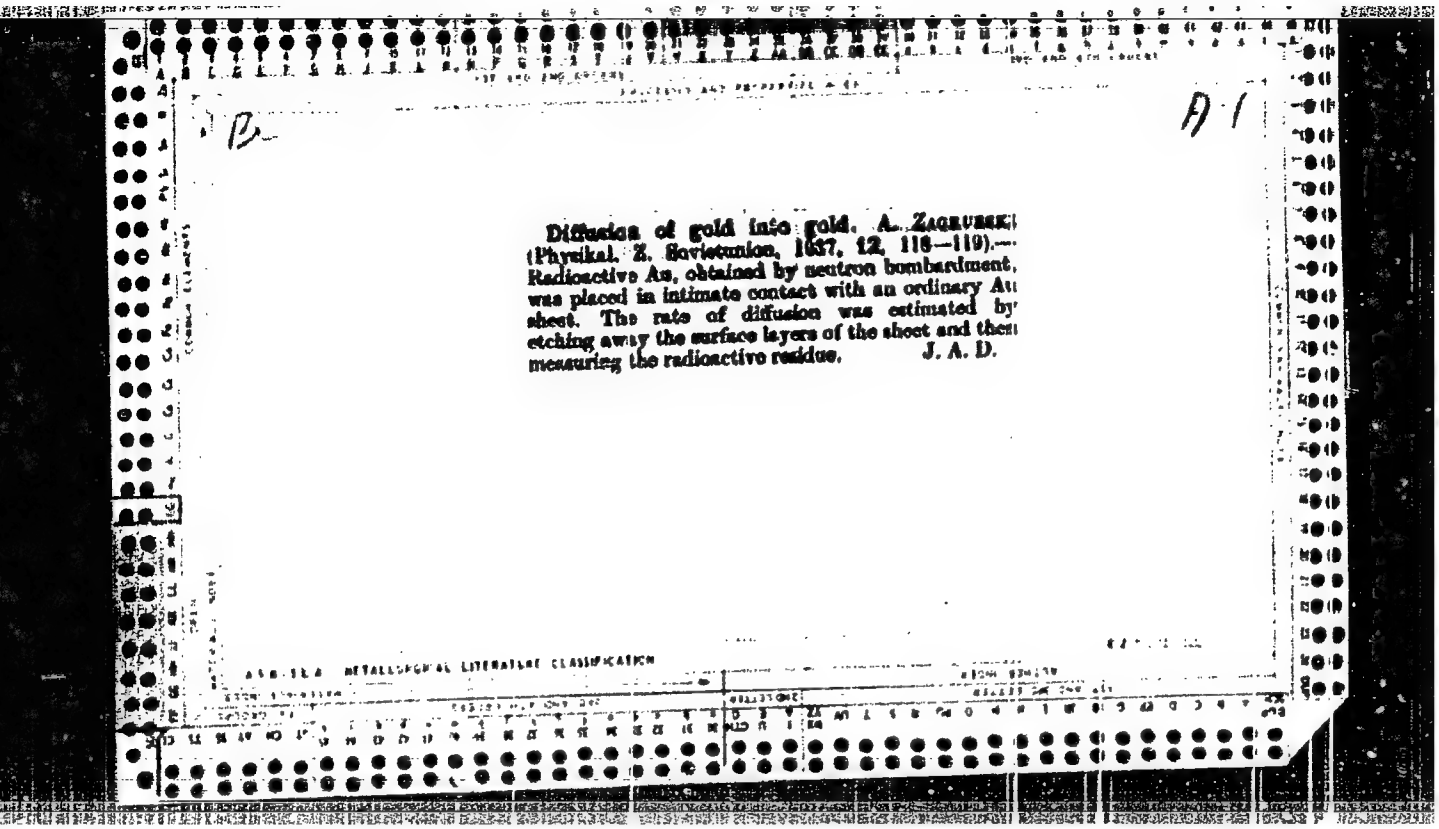
SUBMITTED: 29Jan63	DATE ACQ: 15Aug63	ENCL 00
SUB CODE: CH	NO REF SOV: 012	OTHER: 017

Card 3/3



A-1

Coefficient of self-diffusion of gold. A. M. ZAGOUSKI (Bull. Acad. Sci. U.R.S.S., Sér. Phys., 1937, 903—913; cf. A., 1933, 561; 1937, I, 200). Geiger counter measurements of the penetration of its radioactive isotope from a Au plate into electrolytically deposited Au layers give vals. at 800—1020° which can be represented by $D = 1{\cdot}36 \times 10^{4}e^{-68000/RT}$. The results accord with the formulæ of Langmuir and of Braune. I. McA.



B

A 1

Diffusion of gold into gold. A. ZAGRUBSKI (Physikal. Z. Sowjetunion, 1937, 12, 116—119).—Radioactive Au, obtained by neutron bombardment, was placed in intimate contact with an ordinary Au sheet. The rate of diffusion was estimated by etching away the surface layers of the sheet and then measuring the radioactive residue. J. A. D.

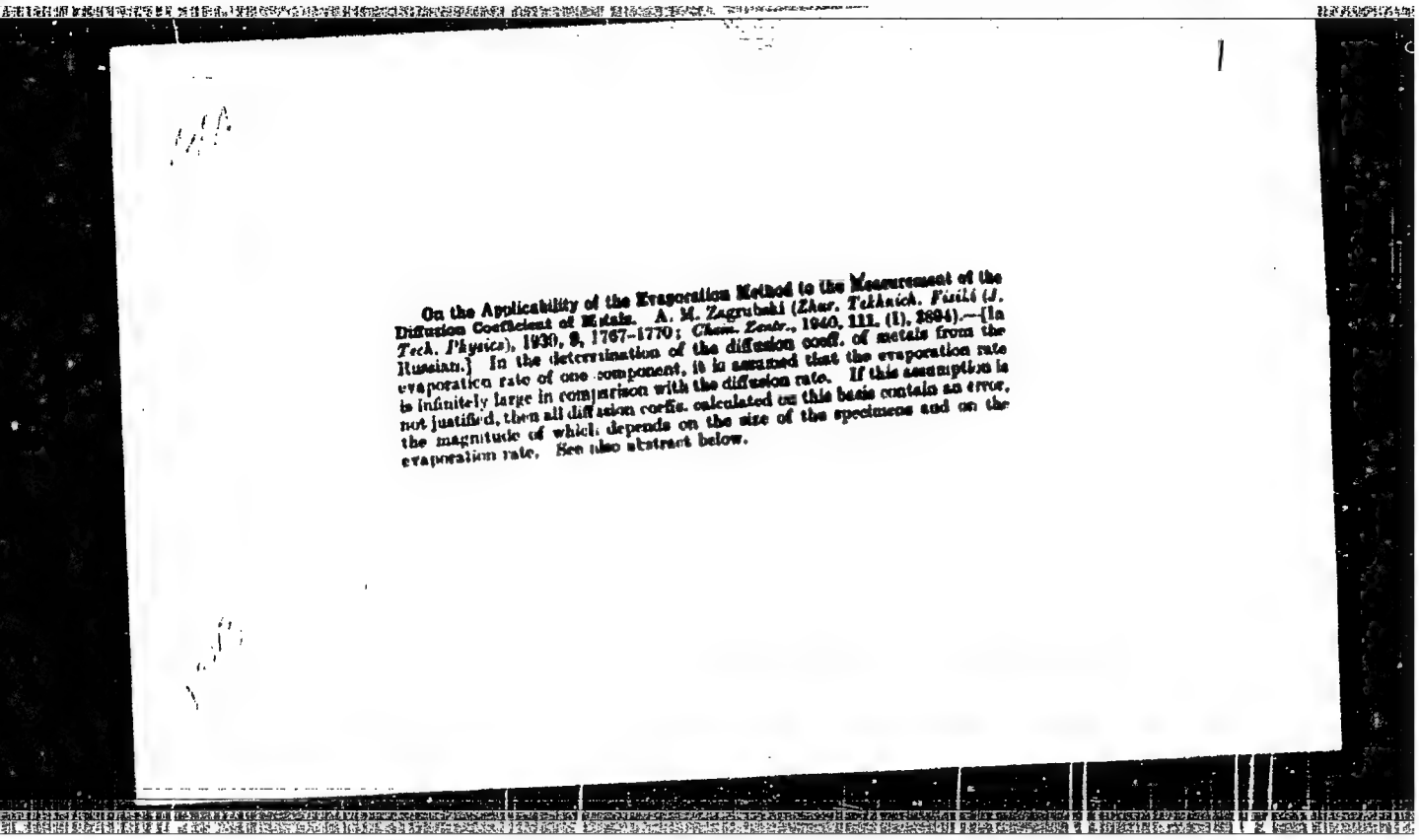
A.S.M.-I.I.A. METALLOGRAPHICAL LITERATURE CLASSIFICATION

ZAGRUBSKIY, A. M.

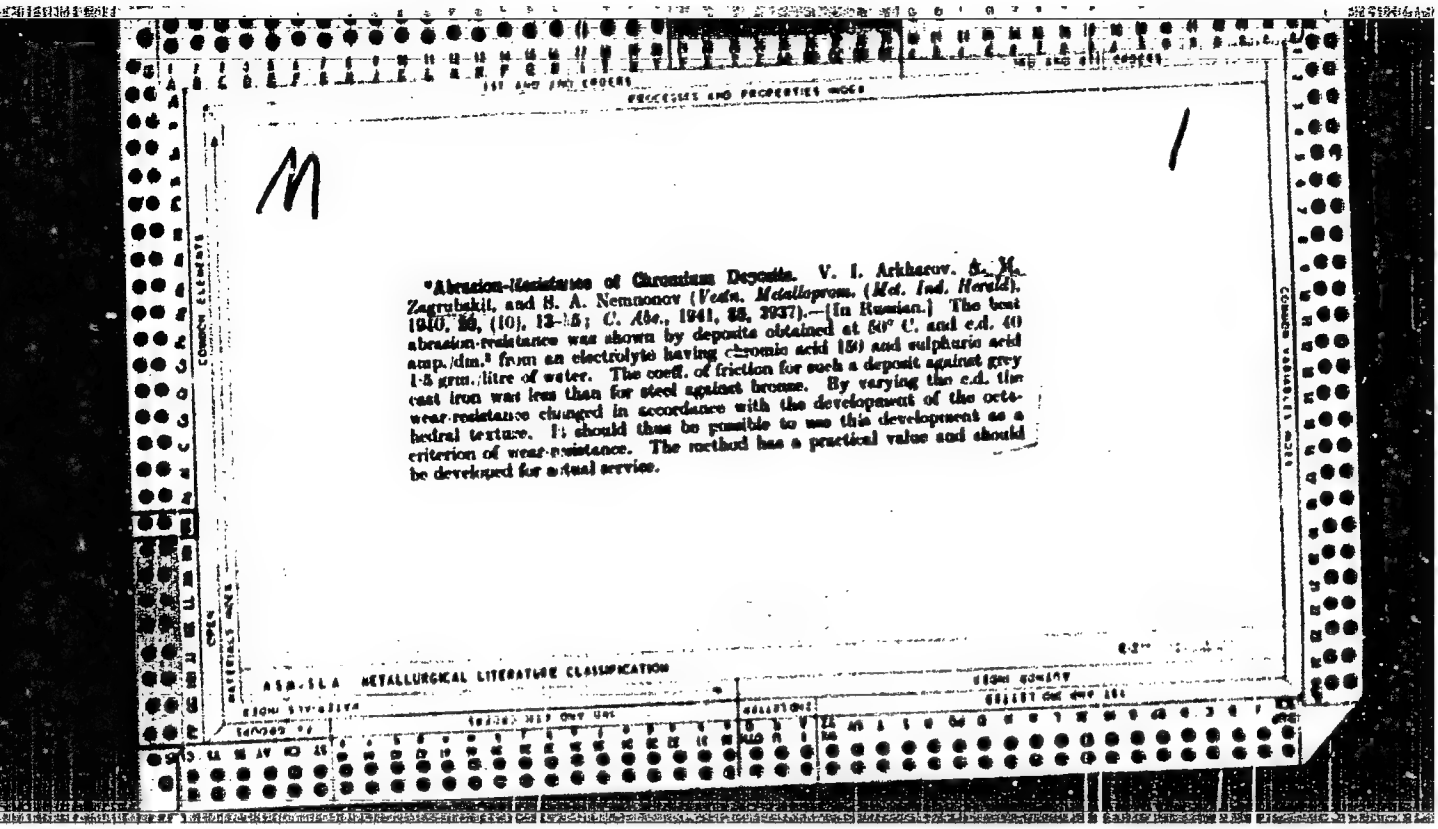
Measurement of the Autodiffusion Coefficient of Gold.

Leningrad Industrial Institute, 1939.

So; U-1837, 14 April 52.



On the Applicability of the Evaporation Method to the Measurement of the Diffusion Coefficient of Metals. A. M. Zagrubski (Zhur. *Tekhnich. Fiziki* (*J. Tech. Physics*), 1939, 9, 1767–1770; *Chem. Zentr.*, 1940, 111, (1), 2894).—[In Russian.] In the determination of the diffusion coeff. of metals from the evaporation rate of one component, it is assumed that the evaporation rate is infinitely large in comparison with the diffusion rate. If this assumption is not justified, then all diffusion coeffs. calculated on this basis contain an error, the magnitude of which depends on the size of the specimens and on the evaporation rate. See also abstract below.



M

1

*Abrasion-Resistance of Chromium Deposits. V. I. Arkharov, S. M. Zagrubskii, and S. A. Nemnonov (*Vestn. Metalloprom.* (*Met. Ind. Herald*), 1940, 20, (10), 12–15; *C. Abs.*, 1941, 35, 2937).—[In Russian.] The best abrasion-resistance was shown by deposits obtained at 50° C. and c.d. 40 amp./dm.² from an electrolyte having chromic acid 150 and sulphuric acid 1·5 grm./litre of water. The coeff. of friction for such a deposit against grey cast iron was less than for steel against bronze. By varying the c.d. the wear-resistance changed in accordance with the development of the octahedral texture. It should thus be possible to use this development as a criterion of wear-resistance. The method has a practical value and should be developed for actual service.

ZAGRUDNYI, Ivan Vasil'yevich, inzh.-mekhanik; AGEYEV, P.M., red.; GONCHAROVA, Ye.I., tekhn. red.

[How to obtain high productivity from earthmoving machinery] Kak proizvoditel'no ispol'zovat' zemleroinye mashiny. Belgorod, Belgorodskoe knizhnoe izd-vo, 1961. 42 p. (MIRA 15:2)

(Earthmoving machinery)

ZAGRUSHEV, A. A.

Feeding and Feeding Stuffs

Intensive raising and fattening of the young of Simmenthal crossbreeds. Sov. zootekh. 7 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress. November 1952. UNCLASSIFIED.

ZAGRUZINA, I.A.

Some features of Mesozoic granitoid magmatism of the eastern shore of Chaun Bay (Chukchi National area). Trudy Len.ob-va est. 74 no. 1:26-29 '63. (MIRA 17:9)

ZAGRUZINA, I.A.

Characteristic lamprophyre dikes in Chaun District of Chukotka. (MIRA 15:7)
Vest. LGU 17 no.12:94-95 '62.
(Chaun District--Lamprophyres) (Chaun District--Dikes (Geology))

ZAGRUZNYY, P.L.

Moistening the seeds with radioactive mineral waters before planting. Zemledelie 24 no.1:65-68 Ja '62. (MIRA 15:2)

1. Khmel'nitskaya rayonnaya gosudarstvennaya kontrol'no-semennaya laboratoriya Vinnitskoy oblasti.
(Radioactive substances--Physiological effect) (Seeds)

ZAGRYADSKAYA, A.P.

Some possibilities of medicolegal expertise on evidence adhered to the surface of weapons for stabbing and cutting and weapons for stabbing. Sud.-med. ekspert. 6 no.3:24-27 Jl-S'63. (MIRA 16:10)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.I.Zakonov) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(CRIMINAL INVESTIGATION)

ZAGNYADSKAYA, A.F.

Some characteristics of stabbing and cutting lesions depending on the mechanism of their formation. Sud.-med.ekspert. 7 no. 2:3-7 Ap-Je '64. (MIRA 17:7)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.I.Zakonov) Gor'kovskogo meditsinskogo instituta imeni Kirova.

ZAGRYADSKAYA, A. P.

Dissertation: "A Method of Roentgenological Investigation in the Diagnosis of Poisoning by Salts of Heavy Metals and Metallo-Organic Compounds." Cand Med Sci, Gor'kiy Medical Inst, Gor'kiy, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 6, Mar 54)

SO: SUM 243, 19 Oct 54

ZAGRYADSKAYA, A.P.

Chemical studies in expertise on stab wounds. Sud.-med. ekspert. 4 no.4:32-35 O-N-D '61. (MIRA 14:12)

1. Kafedra sudebnoy meditsiny (zav. - prof. I.A.Zakonov) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(WOUNDS) (CHEMISTRY,FORENSIC)

ZAGRYADSKAYA, A.F.

Diagnostic possibilities in the histological examination of stabbed and cut wounds. Sud.-med. ekspert. 8 no.1:3-6 Ja-Mr '65.
(MIRA 18:3)

1. Kafedra sudebnoy meditsiny (zav. - dotsent A.F.Zagryadskaya) Gor'kovskogo meditsinskogo instituta imeni Kirova.

L 12294-63 EPF(c)/EWT(m)/BDS AFFTC/AFGC Pr-4 EM/MM

S/081/63/000/005/051/075

AUTHOR: Masagutov, R. M., Berg, G. A., Volkova, L. I., Plotnikova, L. I., Pechnikova, T. N. Zagvyadskaya, L. M. and Mironov, A. A.

TITLE: Combinations of preparation of raw material for catalytic cracking and obtaining of neutralized contact catalyst

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 499, abstract 5P147 (Tr. Bashkirsk. n.-i. in-t. po pererabotke nefti, 1962, no. 5, 88 - 93)

TEXT: At an experimental plant in 2 l capacity reactor in a mobile layer of bulbous alumosilicated catalyst (KT) at 450° C volume speeds of 0.7, 1.0 and 1.5 hours^{-1}, circulation ratio (KT) 3:1 (index of activity of KT 32 - 33 points) experiments were conducted on cracking of purified (so-called "depleted") gas oils from a plant for producing neutralized contact catalyst (NChK) and extracted vacuum gas oil from a mixture of Shkapov and Romashkin petroleum. In the catalytic cracking of acid purified gas oil the extraction of coke is lower than in cracking of unrefined gas oils. Gas which forms in cracking of refined gas oil contains more propane-propylene and butane-butylene fractions and less

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L 12294-63 3

Combinations of preparation S/031/63/000/005/051/075

H_2S. Gasoline, extracted in cracking of refined gas oil, contains a smaller amount of S compounds and is more stable during storage. As a result of cracking of refined gas oil a 30 - 40 % fraction of diesel fuel with content of S $\leq$ 1 % is extracted. The process is economical, which is indicated by calculations conducted by one of the Ufim oil refineries. A. Nagatkina.

[Abstractor's note: Complete translation]

Card 2/2

MASAGUTOV, R.M.; DANILOVA, R.A.; ZAITOVA, A.Ya.; GILYAZEV, N.G.; ZAGRYATSKAYA, L.M.; BUGAY, Ye.O.; PRYAKHINA, K.P.

High-temperature catalytic cracking of heavy fractions of straight-run gasoline. Trudy BashNII NP no.6:14-18 '63. (MIRA 17:5)

DOBROTINA, A.F.; ZAGRYADSKAYA, L.P.

Excretion of estrogenic hormones in some forms of dysfunctional uterine hemorrhage. Akush. i gin. no.1:102-107 '65.
(MIRA 18:10)

1. Kafedra akusherstva i ginekologii (zav.- prof. S.S. Dobrotin) lechebnogo fakul'teta Gor'kovskogo meditsinskogo instituta imeni Kirova.

ZAGRYADSKAYA, L.P.

Case of a hematoma of the generative tract. Akush. i gin. 39 no.5:146 S-O '63. (MIRA 17:8)

1. Iz kafedry akusherstva i ginekologii pedfatricheskogo fakul'teta Gor'kovskogo meditsinskogo instituta imeni S.M. Kirova (zav. - prof. S.S. Dobrotin).

ZAGRYADSKAYA, L.P., vrach

Intra-arterial transfusion of blood in obstetrical practice; according to data from the maternity homes in Gorkiy. Sbor. nauch. rab. kaf. akush. i gin. GMI no.2:60-62 '60. (MIRA 15:4)

1. Rodil'nyy dom No.1 g. Gor'kogo. Nauchnyy rukovoditel' prof. G.K. Cherepakhin, glavnyy vrach M.N.Bykov.
(OBSTETRICS) (BLOOD—TRANSFUSION)
(DEATH, APPARENT)

ZAGRYADSKIY, I.Ya.

Effect of shifting of the theodolite telescope in its bearings on angle measurement readings. Geod.i kart. no.2:14-25 Ap '56. (MLRA 9:10)
(Theodolites) (Triangulation)

ZAGRYADSKIY, I.Ya.

Field study of the DD-2 range finder. Geod. i kart. no.9:28-32 N '56. (MLRA 10:1)

(Range finding)

SHAPIRO, M., inzh.; ZAGRYADSKIY, V., inzh.; LEVINSKIY, L., inzh.

Production line manufacture of thin-walled reinforced concrete shells. Na stroi. Ros. no.10:31-32 O '61. (MIRA 14:11)
(Roofs, Shell)

KONNILOV, Aleksandr Ivanovich; MININ, V.F.[deceased]; ZINOV'YEV, Anatoliy Yakovlevich; ZAGRYADSKIY, Vasiliy Ivanovich; KALININ, O.V., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Mesh-reinforced concrete roofs for industrial buildings; experience of the "Orgtekhstroi" Trust and Trust No.44 of the Administration of Construction of the Leningrad National Economic Council]Armotsementnye pokrytiia dlia promyshlennykh zdanii; iz opyta raboty tresta "Orgtekhstroi" i tresta No.44 Upravleniia stroitel'stva Lensovnarkhoza. Leningrad, 1962. 16 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: "Stroitel'naia promyshlennost'," no.5) (MIRA 15:8)

(Roofing, Concrete) (Industrial buildings)

ZAGRYADSKIY, V. P., GUBACHENKO, I. V. and CHULOVSKIY, L. K.

"Comparative Characterization of the Effect of Phenamene and Phenatene", Voyenno-medits. zhur., No. 1, pp 41-45, 1955.

Verbatim translation D 312227, 18 Aug 1955

EXCERPTA MEDICA Sec 2 Vol 12/11 Physiology Nov 59

5153. VARIATIONS OF SUGAR, POTASSIUM AND CALCIUM CONTENTS IN BLOOD AND CEREBROSPINAL FLUID DURING HYPOXAEMIC CONVULSIONS - Zagryadskiy V. P. Dept. of Milit. Occup. Physiol., S. M. Kirov Milit. Med. Acad., Leningrad FIZIOL. ZH. IM. SECH. 1959, 45/1 (103-109) Graphs 1 Tables 6

Hypoxaemic convulsions were induced in 20 dogs and 5 cats placed in the rarefied atmosphere of a pressure chamber at a simulated altitude of 13,000 m. The blood sugar level rose during the convulsions, the sugar content of CSF remaining practically unchanged. If the animal's blood sugar level had been lowered by preliminary insulin administration, the convulsions set in earlier and ran a more stormy course. On the other hand, preliminary administration of glucose delayed the appearance of convulsions. K and Ca contents of plasma and CSF were subject to very slight variations during the convulsions, no regular trends being noted in their variations.

ZAGRYADSKIY, V.P., podpolkovnik meditsinskoy sluzhby, kand.med.nauk;
LITSOVA, N.M., podpolkovnik meditsinskoy sluzhby, kand.med.nauk

Successive visual images in flying activity. Voen.-med. zhur. no.8: 61-64 Ag '61. (MIRA 15:2)
(AVIATION MEDICINE) (OPTICAL ILLUSIONS)

ZAGRYADSKIY, V. P., IMANGULOV, R. G. and LISTOVA, N. M.

"The Gas Exchange and Energy Consumption of the Men in the Rifle Units Engaged in Tactical Exercises".

Voyenno Meditsinskiy Zhurnal, No. 4, 1962

ZHELUDKOVA, T.N.; ZAGRYADSKIY, V.P.; SULIMO-SAMUYLLO, Z.K.

Effect on the organism of a prolonged exposure to a gaseous medium with increased carbon dioxide content. Funk. org. v usl. izm. gaz. sredy 3:187-192 '64. (MIRA 17:11)

L 42819-66 EWT(1) SCIB DD

ACC NR: AP6027251 SOURCE CODE: UR/0177/66/000/007/0055/0057

AUTHOR: Zaytsvadskiy, V. P. (Lieutenant colonel; Medical corps; Doctor of medical sciences); Sidorov, O. Yu. (Lieutenant colonel; Medical corps; Candidate of medical sciences); Sulimo-Samuyllo, Z. K. (Candidate of biological sciences)

ORG: none

TITLE: Some characteristics of the bubbling of human blood plasma at low barometric pressure

SOURCE: Voyenno-meditsinskiy zhurnal, no. 7, 1966, 55-57

TOPIC TAGS: decompression sickness, blood plasma, human physiology

ABSTRACT: In an attempt to explain individual variations in susceptibility to decompression sickness, 0.5-ml samples of blood plasma from 370 healthy young subjects of both sexes were studied for bubbling during reduction of the ambient pressure (simulated climb to an altitude of 10,000 m in 40 sec, followed by 10 min at this altitude during which time the number of bubbles forming per minute was noted). In samples of plasma from 209 subjects, bubbles first appeared at altitudes anywhere from 1 to 10 km (mean = 5.42 ± 2.32 km with most samples falling in the range from 4 to 6), but in 14 samples no bubbles appeared even at 14—18.5 km. On the basis of the number of bubbles formed, the plasma samples were classified into 4 groups, ranging from a "silent" type which does not bubble to a type which "explodes" into bubbles all at once.

UDC: 616-001.12-07:616.15-07

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Studies revealed no correlation between the bubbling properties of the plasma and the blood protein content, viscosity, or optical density. However, a lower surface tension was associa with increased resistance to bubbling at low pressures, which can be explained by the effect of the varying amounts of surface-active agents in the plasma samples.

[26]

SUB CODE: 06/ SUBM DATE: none/ ATD PRESS: 5066

Card 2/2 fdl

L 05815-67

ACC NR: AP6033918 (N) SOURCE CODE: UR/0177/66/000/010/0058/0061

22
B

AUTHOR: Zagryadskiy, V. P. (Lieutenant colonel, Medical corps; Candidate of medical sciences); Sidorov, O. Yu. (Lieutenant colonel, Medical corps; Candidate of medical sciences); Sulimo-Samuyllo, Z. K. (Candidate of biological sciences)

ORG: none

TITLE: Changes in human organic functions and working capacity depending on rate of increase of carbonic acid content in a hermetically sealed room

22

SOURCE: Voyenno-meditsinskiy zhurnal, no. 10, 1966, 58-61

TOPIC TAGS: medical research, medical experiment, carbonic acid

ABSTRACT: An investigation was made of human organic functions and working capacity in relation to prolonged (several hours) increase of carbonic acid concentration in hermetically sealed rooms. A group of young men unfit for military service were the subjects of 110 investigations. It was shown that the lower the rate of increase of carbonic acid concentration in the inhaled air of a hermetically-sealed room, the more gradual, complete, and perfect the action of the compensatory mechanisms in the human body. It was concluded that under conditions of relative

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UDC: 612.234:62.213.4

L 05815-67
ACC NR: AP6033918

tranquility (hypodynamy) and moderate mental activity, the human organism can gradually compensate (in 2—5 hr) for the adverse effect of carbonic acid concentration as high as 5.5—6%, and can maintain satisfactory working ability. Elimination of hypoxy by increasing oxygen pressure to 21% improved working ability considerably. A supply of bottle oxygen must therefore be reserved in hermetically sealed rooms in case the air-changing system fails. Human reserves decrease steadily as the carbonic acid content in hermetically sealed rooms increases. Any additional physical load, or the simultaneous action of factors such as high temperature, noxious gases, etc., can impede the operation of the compensatory mechanism and accelerate the deterioration of the organism sharply. Under such conditions, permissible concentrations of carbonic acid in hermetically sealed rooms must be smaller. Further studies of this problem are suggested. Orig. art. has: 3 figures.

SUB CODE: 06,05/ SUBM DATE: none/

Card 2/2

ACC NR: AT6036565 SOURCE CODE: UR/0000/66/000/000/0175/0175

AUTHOR: Zagryadskiy, V. P.; Sidorov, O. U.; Sulimo-Samuyilo, Z. K. 24

ORG: none

TITLE: Effect of an altered gas medium on the development and course of decompression sickness [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 175

TOPIC TAGS: hypercapnia, decompression sickness, aeroembolism

ABSTRACT: The effect of hypercapnia on the incidence and course of decompression disorders was studied in acute and chronic experiments on dogs and rats.

Animals exposed to atmospheres containing 5%, 7%, and 9% CO_2 were subjected to decompression from 760 mm Hg to 198 mm Hg in 2.5 to 3 min, (with pO_2 maintained at 143 mm Hg). A special double cannula captured the bubbles formed in the dogs' blood. The intensity and rate of bubble formation was compared with that in air-breathing controls subjected to similar pressure drops.

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L 10957-67
ACC NR: AT6036565

Rats were run on a treadmill at moderate speeds 10 min after decompression. Incidence, severity, and onset time of decompression sickness symptoms were compared with controls.

It was found that preliminary exposure to hypercapnia atmospheres resulted in more rapid and more intensive formation of gas emboliems during barometric pressure drops. Moderate physical exercise after decompression hastened the onset of decompression sickness, and increased the incidence and severity over the controls. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: COMay66

Card 2/2

BELYANTSEV, A.M.; GAPONOV, A.V.; ZAGRYADSKIY, Ye.V.

"Counter-stub" retarding system for traveling-wave amplifiers. Radiotekh. i elektron. 4 no.3:505-516 Mr '59. (MIRA 12:4)
(Microwaves)

06339
SOV/141-2-1-11/19

AUTHORS: Bravo-Zhivotovskiy, D.M., Yeremin, B.G., Zagryadskiy, Ye.V., Miller, M.A. and Mochenev, S.B.

TITLE: Experimental Study of the Motion of Electron Beams in Weakly Non-uniform High-frequency Fields

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 1, pp 94 - 100 (USSR)

ABSTRACT: It has been shown in previous papers (A.V. Gaponov, M.A. Miller - Refs 1-3) that non-relativistic motion of a changed particle in a weakly non-uniform field can be represented as the superposition of an oscillation with the frequency of the external field $\underline{r}^{(1)}(t)$ and a motion averaged over the period of that field, $\underline{r}^{(0)}(t)$. These components obey Eqs (2) and (3) and since the r.h.s. of Eq (2) containe the electric potential vector the averaged motion of a particle is completely dofined by the initial conditions and the form of the high-frequency potential $\Phi(\underline{r})$. The equations are best proved by studying the passage of an electron beam through a high-frequency potential barrier.

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Experimental Study of the Motion of Electron Beams in Weakly Non-uniform High-frequency Fields

The experiments demonstrated deflection of charged particles along the slope of the barrier; reflection from the barrier; high-frequency focusing. It should be possible to study the first effect in an ordinary multi-cavity magnetron working in the π-mode. Such measurements are hindered by a discharge which arises even in a cold magnetron when a high enough power is introduced. In a cold magnetron without magnetic field, the electrons appearing as a result of ionisation must slide down the slope of the potential barrier to the cathode and faster ions will arise there, the height of whose potential barrier is, from Eq (2), $(m_i/m_e)^2$ times less. Thus, a high-frequency impulse, introduced into a cold magnetron, will produce in the anode-cathode circuit a current pulse of reverse sign with an extended near flank. Measurements have been made by applying a positive voltage to the anode to compensate for the discharge current, with a typical result as in

Experimental Study of the Motion of Electron Beams in Weakly Non-uniform High-frequency Fields

Figure 1. This demonstration is only qualitative since the curve of Figure 1 should be linear. Reasons suggested for the non-linearity are: tunnel-effect, distortion of potential barrier, interaction between electrodes and particle-source in the interaction space. The reflection of electrons from a potential barrier has been studied using the special arrangement of Figure 2 in which a beam of electrons traverses the centre of a waveguide resonator. The resonator is excited with 1 μsec pulses of power at 60 Gc/s. The height of the potential barrier is measured by the negative compensating pulse applied to the cathode of the electron gun. The graphs of Figure 3 are experimental results which agree with the theoretical expectations of Eqs (5) and (6) to better than the experimental error of 7%. The possibility of focusing a rectilinear electron beam has been demonstrated using a form of travelling-wave tube with a helical delay line of mean diameter 5.9 mm, wire diameter 0.3 mm, pitch 0.63 mm. The wavelength was 10 cm. The focusing of the

Experimental Study of the Motion of Electron Beams in Weakly non-uniform High-frequency Fields

electron beam was indicated by the appearance of collector current with high-frequency power sent along the helix. The transverse velocity within the beam could be changed by applying a constant transverse magnetic field over a short length of the flight path. The relation between the limiting transverse velocity of electrons and the power necessary to confine them within the limits of the helix is Eq (8) and the experimental result of Figure 4 shows excellent agreement. V.A. Flyagin and V.A. Lopyrev assisted in preparation of the apparatus.
There are 4 figures and 7 references, 6 of which are Soviet and 1 English.

ASSOCIATION: Issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Radiophysics Research Institute of Gor'kiy University)

SUBMITTED: October 31, 1958

Card 4/4

AUTHORS: A.M. Belyantsev, A.V. Gaponov, Ye.V. Zagryadskiy SOV/109--4-3-22/38

TITLE: A Delay System of the "Counter-Stub" Type for Travelling-Wave Amplifiers (Zamedlyayushchaya sistema tipa "Vstrechnyye shtyri" dlya usiliteley s begushchey volnoy)

PERIODICAL: Radiotekhnika i Elektronika, Vol 4, Nr 3, 1959, pp 505-516 (USSR)

ABSTRACT: The possibility of employing a counter-stub system (of the type illustrated in Fig 1) was mentioned by Fletcher in 1952 (Ref 1). Here the problem is investigated in some detail. It is assumed that a counter-stub system of the type shown in Fig 1 can be represented by means of an equivalent circuit which consists of a parallel-conductor transmission line with capacitances connected across the line at spacings l. The circuit is shown in Fig 3. The scattering equation of the system is given by:

$$\cos\varphi = \cos kl\left(1 + \frac{C_o + \tilde{C}_o}{2C_1}\right) - \frac{kC_T}{2C_1}\sin kl, \qquad (1)$$

where k is the wave number, l is the length of the stubs, C_o and $\tilde{C}_o$ are the capacitances between the

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stubs and the "base", respectively; C_1 is the capacitance between neighbouring stubs (per unit length); $j\omega C_T = jB_T$ is the equivalent capacitance of a node. The above circuit does not take into account the cross-coupling capacitances of the system. If these capacitances are taken into account, the equivalent circuit becomes more complicated and is in the form of the diagram shown in Fig 4. For this case the characteristic equation of the system is given by:

$$\operatorname{tg}^2 \frac{kl}{2} = \frac{C_o + 4 \sum_{n=1}^{m+1} C_n \sin^2 \frac{n\varphi}{2}}{C_o + 4 \sum_{n=1}^{m+1} C_n \sin^2 \frac{n}{2}(\varphi + \pi)} \qquad (2)$$

where C_n is the capacitance (per unit length) between the stubs which are situated at distances $nD/2$ from each other. The summation in Eq (2) is carried out up to the values of n such that the cross-coupling capacitances

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become negligible. For the counter-stub system in which the "hairpins" are displaced vertically (see Fig 2) or with "hairpins" whose teeth have different cross-sections (see Fig 5), the scattering equation is given by Eq (4). The meaning of the various symbols in Eq (4) should be clear from Fig 5. The scattering curves for two different systems with displaced and differing "hairpins" are shown in Figs 6 and 7. Fig 6 corresponds to the system with similar but displaced "hairpins"; curves (1) and (3) of the figure are corroborated by some experimental points. Fig 7 illustrates a system in which the "hairpins" have different cross-sections. It was found that a decrease in the scattering and an increase in the transmission bandwidth of the system could be obtained, if one of the "hairpins" was removed (screened) from the "base". Examples of such systems are illustrated by the scattering curves of Fig 8. The relative magnitude of the electric field in a counter-stub system can be represented by the so-called interaction impedance or coupling impedance. This is defined by:

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$$K^m_{\alpha\beta} = \frac{E^m_\alpha E^m_\beta}{2h^2_m P} , \qquad (6)$$

where E^m_α and E^m_β are the spatial harmonics of the electric field component, which interact with the electron beam of the system; h_m is the propagation constant of the m-th harmonic, while P is the power carried by the wave. The coupling impedance of the circuit shown in Fig 3 is given by Eq (10'), where the first term is defined by Eq (10"). The coupling impedance of the system shown in Fig 7, in which the first fundamental harmonic is "separated", is given by Eq (14'). On the other hand, in the systems where the "hairpins" are displaced in the horizontal plane, the impedance is also given by Eq (14'), except that the amplitude is represented by Eq (15). The amplitudes of the coupling impedance for the first harmonic of the system shown in Fig 7 is illustrated in Fig 10. Fig 11 shows the coupling impedance of a system with horizontally displaced

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A Delay System of the "Counter-Stub" Type for Travelling-Wave Amplifiers

"hairpins". The coupling impedance of the system was also measured experimentally, and the results are shown by the lower curve of Fig 12; the upper curve of Fig 12 was calculated; this is in poor agreement with the experimental data which is not surprising since Eqs (13) and (14) should be regarded as comparatively rough approximations. On the basis of the above analysis, it is concluded that the counter-stub systems with separated fundamental waves can be successfully employed in travelling-wave amplifiers operating at cm wavelengths. The method of evaluating the dispersion characteristics proposed by the author is comparatively simple and is sufficiently accurate for most practical applications. There are 12 figures and 5 references, 2 of which are English, 2 Soviet and 1 French.

Card 5/5

SUBMITTED: July 9, 1957

BRAVO-SHIVOTOVSKIY, D.M.; YEREMIN, B.G.; ZAGHYADSKIY, Ye.V.; MILLER, M.A.; Mochenev, S.B.

Experimental study of electron-beam motion in slightly inhomogenous high-frequency fields. Izv.vys.uchab.zav.; radiofiz. 2 no.1:94-100 '59. (MIRA 12:10)

1. Issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete.
(Electron beams)

ZAGRYATSKIY, I.V.; FROLOV, I.M.; KISELEV, S.M.

Drying enameled ware by combustion gases. Prom.energ. 11 no.8: 19-21 Ag '56. (MLRA 9:11)
(Enameled ware) (Drying apparatus)

VARFOLOMEYEV, D.F.; BUGAI, Ye.A.; DUDIN, V.N.; ZAGRYATSKAYA, L.M.; ANTIPIN, M.K.; MARKINA, A.I.; POLINSKAYA, M.R.;

Recovering spent caustic using flue gases. Trudy Bash NIINP no.5: 319-322 '62. (MIRA 17:10)

1. Ordena Lenina Ufimskiy neftepererabatyvayushchiy zavod.

S/196/61/000/011/030/042
E194/E155

AUTHOR: Zagryadtskiy, V.I.

TITLE: Parallel operation of asynchronous frequency convertor

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.11, 1961, 27, abstract 11I 206. (Tr. Gor'kovsk. politekhn. in-ta, v.16, no.5, 1960, 67-71)

TEXT: Asynchronous frequency-convertors which are usually driven by induction motors can operate in parallel just like a.c. transformers or generators. They may be paralleled to similar machines already running without employing any synchronising equipment. The asynchronous frequency-convertors easily pull into step despite the difference between instantaneous values of e.m.f. provided that the difference between secondary frequencies does not exceed 4-5%. Asynchronous frequency-convertors in parallel are very stable, and reducing the field voltage to 0.1-0.15 of rated value does not disturb their operation. Load currents are distributed between

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Parallel operation of asynchronous .. S/196/61/000/011/030/042
E194/E155

asynchronous frequency-convertors in inverse proportion to their short-circuit voltages and in direct proportion to the rated output. 4 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

ZAGRYADTSKIY, V.I., inzh.

Parallel operation of asynchronous frequency changers. Trudy GPI 16 no.5:67-71 '60. (MIRA 16:4)

(Frequency changers)

L 10030-63 EPF(c)/EWG AFFTC/ASGC/ASD Pr-4 RM/JH
ACCESSION NR. AP3003265 S/0286/63/000/003/0036/0036

AUTHOR: ... Zagryatskaya, L. M.; Prokof'yeva, ...

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 3, 1963, 36

... oxidation, oxidation inhibitor

... increasing the stability of gasolines by adding oxidation

... acid phenolic oil. [Abstracter's note: complete translation.] Orig. art. has no figures, tables, or formulas.

ASSOCIATION: none

SUBMITTED: 09Apr62 DATE ACQ: 23Jul63 ENCL: 00

OTHER: 000

Card 1/1

ZAGRYAZKIN, N.N.; TIMOSHENKO, Yu.I.

Flame propagation following the ignition with a stabilized and unstabilized electric spark. Trudy Inst. dvig. no.6:110-117 '62. (MIRA 16:5)

(Gas and oil engines—Ignition)

ZAGRYAZHSKIY, A. A.

USSR/Engineering - Construction, Materials Jan 52

"Welded Joints of Concrete-Reinforcing Round Rods," A. A. Zagryazhskiy, Engr

"Gidrotekh Stroi" No 1, pp 14-17

Discusses test results of various types of welded joints: butt joint with circular seam, bent claw, thrown-on hook, close shackle and flat plate. Tabulates and analyzes results as to max strength, comparative metal consumption, or facility of fitting rods to each other.

212T54

ZAGRYAZHSKIY, A. A.

Reinforced concrete Construction

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